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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,225	08/29/2001	Richard S. Seymour	10007205-1	9162

7590 05/30/2006

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER	
JARRETT, SCOTT L	

ART UNIT	PAPER NUMBER
3623	

DATE MAILED: 05/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/942,225	SEYMOUR, RICHARD S.	
	Examiner	Art Unit	
	Scott L. Jarrett	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 May 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

37 CFR § 1.105 - Requirement for Information

Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.

The information is required to identify products and services embodying the disclosed subject matter of the remote management and/or monitoring of network printers or printer components and identify the properties of similar products and services found in the prior art.

In response to this requirement, please provide a list of citations to electronically searchable databases or other indexed collections containing publications that document the knowledge within the disclosed art of printer component inventory management, printer consumables/expendables management or remote rule-based printer management and/or monitoring.

In response to this requirement, please provide the citation and a copy of each publication which any of the applicants authored or co-authored and which describe the disclosed subject matter of printer component inventory management, printer consumables management or remote printer management and/or monitoring.

In response to this requirement, please provide the citation and a copy of each publication that any of the applicants relied upon to develop the disclosed subject matter that describes the applicant's invention, particularly as to developing the remote management and/or monitoring of a plurality of printers in one or more organizations utilizing event-driven/triggered printer component rules (rules-based printer component/consumables management). For each publication, please provide a concise explanation of the reliance placed on that publication in the development of the disclosed subject matter.

In response to this requirement, please provide the names of any products or services that have incorporated the claimed subject matter. Specifically, please provide product release schedules/dates and product manuals/user guides for the JetAdmin and Web JetAdmin products for at least version 5.1 and earlier.

In response to this requirement, please state the specific improvements of the claimed subject matter in claims 1, 9 and 17 over the disclosed prior art and indicate the specific elements in the claimed subject matter that provide those improvements. For those claims expressed as means or steps plus function, please provide the specific page and line numbers within the disclosure, which describe the claimed structure and acts.

In response to this requirement, please state whether any search of prior art was performed. If a search was performed, please state the citation for each prior art collection searched. If any art retrieved from the search was considered relevant to demonstrating the knowledge of a person having ordinary skill in the art to the disclosed printer component inventory management, printer consumables management or remote rule-based printer management and/or monitoring, please provide the citation for each piece of art considered and a copy of the art.

In responding to those requirements that require copies of documents, where the document is a bound text or a single article over 50 pages, the requirement may be met by providing copies of those pages that provide the particular subject matter indicated in the requirement, or where such subject matter is not indicated, the subject matter found in applicant's disclosure.

The fee and certification requirements of 37 C.F.R. § 1.97 are waived for those documents submitted in reply to this requirement. This waiver extends only to those documents within the scope of this requirement under 37 C.F.R. § 1.105 that are included in the applicant's first complete communication responding to this requirement. Any supplemental replies subsequent to the first communication responding to this requirement and any information disclosures beyond the scope of this requirement under 37 C.F.R. § 1.105 are subject to the fee and certification requirements of 37 C.F.R. § 1.97.

The applicant is reminded that the reply to this requirement must be made with candor and good faith under 37 CFR 1.56. Where the applicant does not have or cannot readily obtain an item of required information, a statement that the item is unknown or cannot be readily obtained will be accepted as a complete response to the requirement for that item.

This requirement is an attachment of the enclosed Office action. A complete response to the enclosed Office action must include a complete response to this requirement. The time period for reply to this requirement coincides with the time period for reply to the enclosed Office action, which is 3 months.

TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

DETAILED ACTION

1. This Non-Final Office Action is responsive to Applicant's remarks filed May 22, 2006. Currently Claims 1-31 are pending.

Response to Amendment

2. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Response to Arguments

3. Applicant's arguments, see Page 8, filed May 22, 2006, with respect to the 35 U.S.C. 103(a) rejection(s) of claim(s) 5-6, 11-12 and 20 under Hayward et al., U.S. Patent No. 6,798,997 in view of Haines et al., U.S. Patent No. 6,295,423 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Hayward et al., U.S. Patent No. 6,798,997 in view of Istvan, Anthony, U.S. Patent Publication No. 2002/0042747.

It is noted that the Applicant's did not challenge the Official Notice(s) cited in the previous Office Action(s) therefore those statements as presented are herein after prior art. Specifically it has been established that it was old and well known in the art at the time of the invention:

- to enable users to store and access information into and from a database; and

- to utilize a network interface card to connect/communicate to/with a network.

Title

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: System and Method for Remotely Monitoring Printer Components In Multiple Organizations and Ordering Replacement Printer Components Based on User-Configurable Rules and Printer Component Events.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 5-9, 11-12, 14-17, 21-27 and 30-31 are rejected under 35 U.S.C. 102(b) based upon a public use or sale of the invention.

The public use or sale of the invention, a system and method for managing printer component inventories as sold by the Applicant's under one or more of the following product/service names JetAdmin and/or Web JetAdmin is evidenced by at least the following (as cited in the Notice of References Cited, PTO-892, mailed March 21, 2006) HP.com Web Pages (May 1999), herein after reference A.

Regarding Claims 1, 5-9, 11, 14-17, 21-22 HP teaches a system and method for managing printer component inventories (remote printer management) comprising:

- defining one or more printer component rules for one or more printers in more than one (first/second) organization wherein each printer component rule defines a printer component event that indicates that the printer component requires replacement (reference A: "Remote Management, Page 1, Last Row; "Configurable Alerts", Page 2, Row 2; Page 4);

- monitoring the printer components in more than one (first/second) organization printers to detect an occurrence of a printer component event as defined by the printer component rule (reference A: "Enhanced Management Capabilities", Page 1; "Enhanced Consumables Status", Page 2, Row 3; Page 4; Figures 2, 6); and

- replacing a printer component when a printer component event is detected (reference A: "checking how soon a device will need consumables ordered", Last Paragraph, Page 4).

Regarding Claim 5 HP teaches a system and method for remotely monitoring and managing printer component inventories wherein the printer component is a laser printer and the printer event (alert, notification, status) is a low toner condition (reference A: HP Toner Gauge Technology, Row 3, Page 3; "HP toner gauge technology provides additional information with regards to consumable levels of toner and paper. This new functionality allows the LAN administrator to have a method for checking how soon a device will need consumables ordered.", Last Paragraph, Page 4; "Estimated Black Toner Level", Figure 6).

Regarding Claims 6, 11 and 20 HP teaches a system and method for remotely monitoring and managing printer component inventories further comprising presenting an interface to one or more organizations (team, group, division, LAN administrator, logical groups, etc.) wherein the interface enables the organization to define

organizational printer component rules (reference A: configurable alerts, enhanced consumables status, etc.; Rows 2-3, Page 2; Page 4; Figures 1, 2, 7).

Regarding Claims 7, 15-16 and 22 HP teaches a system and method for remotely monitoring and managing printer component inventories wherein detecting the printer component event further comprises notification that the printer component event has occurred in one or more organizations (reference A: configurable alerts, enhanced consumables status, etc.; Rows 2-3, Page 2; Page 4; Figures 1, 2, 7).

Regarding Claims 8, 14 and 21 HP teaches a system and method for remotely monitoring and managing printer component inventories wherein the monitoring further comprises periodically polling the printer components of the printers in the first/second organizations (reference A: real-time printer status, proactive printer management, configurable alerts, scheduled automatic discovery; Paragraphs 1, 3, Page 1; Row 2, Page 2; Row 9, Page 2; Row 1, Page 3).

Regarding Claim 12 HP teaches a system and method for remotely monitoring and managing printer component inventories wherein the connection means further comprises a network interface card that provides a connection with a network (reference A: network printers, network peripherals, IPX/IP protocols, Web Server, printer IP address; Page 1; Figures 2, 6).

Regarding Claim 23 HP teaches a system and method for remotely monitoring and managing a plurality of peripherals in a plurality of organizations (logical groups, teams, entities, locations, offices, etc.) wherein the monitoring comprises monitoring circuitry (software, hardware, module, component, computer, device, etc.; reference A: "integrated web server", Paragraphs 1-2, Page 1; JetDirect, Row 4, Page 2; Row 7, Page 2; Paragraph 1, Page 6).

Regarding Claims 24, 27 and 31 HP teaches a system and method for remotely monitoring and managing a plurality of peripherals in a plurality of organizations wherein the monitoring comprises monitoring using an entity (person, group, computer, hardware, software, device, LAN administrator, etc.) remotely spatially located from at least one of the printers of one of the organizations (teams, groups, logical groupings, locations, offices, etc.; reference A: "remote management", Page 1; Paragraph 1, Page 6; Figures 1-9).

Regarding Claims 25-26 and 30 HP teaches a system and method for remotely monitoring and managing a plurality of peripherals in a plurality of organizations (teams, groups, logical groupings, locations, divisions, offices, etc.; reference A: "remote management", Page 1; Paragraph 1, Page 6; Figures 1-9).

An issue of public use or on sale activity has been raised in this application. In order for the examiner to properly consider patentability of the claimed invention under

35 U.S.C. 102(b), additional information regarding this issue is required as follows: information regarding the disclosed subject matter's public use and/or sale (e.g. product road maps, sales presentations, investor disclosures, case studies, product manuals, product brochures, training courses/materials, user guides/references, evaluator guides/manuals, etc.), when the disclosed subject matter, was developed, launched, marketed and sold, when and what clients utilized and/or were provided with services which utilized the disclosed subject matter as well as any information relied upon in developing the disclosed subject matter.

Applicant is reminded that failure to fully reply to this requirement for information will result in a holding of abandonment.

7. Claims 1-31 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over HP.com Web Pages (May 1999), herein after reference A.

Regarding Claims 1, 9 and 17 HP teaches a system and method for managing printer component inventories (remote printer management) comprising:

- defining one or more printer component rules for one or more printers in more than one (first/second) organization wherein each printer component rule defines a printer component event that indicates that the printer component requires replacement (reference A: "Remote Management, Page 1, Last Row; "Configurable Alerts", Page 2, Row 2; Page 4);

- monitoring the printer components in more than one (first/second) organization printers to detect an occurrence of a printer component event as defined by the printer component rule (reference A: "Enhanced Management Capabilities", Page 1; "Enhanced Consumables Status", Page 2, Row 3; Page 4; Figures 2, 6); and

- replacing a printer component when a printer component event is detected (reference A: "checking how soon a device will need consumables ordered", Last Paragraph, Page 4).

Regarding Claims 2-3 and 18-19 HP teaches a method and system for remote printer management and monitoring further comprising ordering consumables

(replacement components) upon the detection of an event (reference A: enhanced consumable status, Row 3, Page 2; Last Paragraph, Page 4).

HP does not expressly teach that the ordered consumables/replacement components are shipped to the location of the printer in which the event was detected.

The ordering of consumables for a particular device wherein the result of the order is to have the ordered replacement components shipped to the device for which they are needed is a very common and well known business practice wherein sending ordered consumables/replacement components parts to another location and/or printer clearly defeats the purpose of ordering the replacement components which is to replace the low consumables with the ordered replacements.

It would have been obvious to one skilled in the art at the time of the invention that the system and method for remotely monitoring and managing a plurality of printers in one or more organizations as taught by HP would have benefited from shipping order replacement components to the location of the printer for which the printer event was detected in accordance to well known business practice.

Regarding Claim 4 HP teaches a system and method for remotely monitoring a plurality of printing devices (peripherals, network connected devices) and their

components (reference A: Paragraphs 1-4, Page 1; Table, Pages 1-3; "Ink Error", "Configure Paper", etc., Figure 1; Figures 5-9).

HP does not expressly teach that the printer components are selected from the list of printer components as claimed.

The printer components listed, toner, ink, ribbon and dry-medium cartridges, ink bladders, belts and the like, are each old and very well known in the art of printer management and/or monitoring wherein the printer components are widely used by any number of manufacturers for any number of printing devices. Further monitoring such components, which invariably need replacement, for replacement is a common and widely practiced business practice without which the printing devices for which these consumables/components are used would quickly become inoperable, unusable and/or unproductive.

It would have been obvious to one skilled in the art at the time of the invention that the system and method for remotely monitoring and managing a plurality of printing devices as taught by HP would have benefited from monitoring any of a plurality of the printer components in the printing devices in accordance to well known business practice.

Further it is noted that the list of printer components merely represents non-functional descriptive material and are not functionally involved in the steps recited nor do they alter the recited structural elements. The recited method steps would be performed the same regardless of the specific printer component(s) being managed. Further, the structural elements remain the same regardless of the specific printer component(s) being managed. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, *see In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP 2106.*

Regarding Claim 5 HP teaches a system and method for remotely monitoring and managing printer component inventories wherein the printer component is a laser printer and the printer event (alert, notification, status) is a low toner condition (reference A: HP Toner Gauge Technology, Row 3, Page 3; "HP toner gauge technology provides additional information with regards to consumable levels of toner and paper. This new functionality allows the LAN administrator to have a method for checking how soon a device will need consumables ordered."., Last Paragraph, Page 4; "Estimated Black Toner Level", Figure 6).

Regarding Claims 6, 11 and 20 HP teaches a system and method for remotely monitoring and managing printer component inventories further comprising presenting an interface to one or more organizations (team, group, division, LAN administrator,

logical groups, etc.) wherein the interface enables the organization to define organizational printer component rules (reference A: configurable alerts, enhanced consumables status, etc.; Rows 2-3, Page 2; Page 4; Figures 1, 2, 7).

Regarding Claims 7, 15-16 and 22-23 HP teaches a system and method for remotely monitoring and managing printer component inventories wherein detecting the printer component event further comprises notification that the printer component event has occurred in one or more organizations (reference A: configurable alerts, enhanced consumables status, etc.; Rows 2-3, Page 2; Page 4; Figures 1, 2, 7).

Regarding Claims 8, 14 and 21 HP teaches a system and method for remotely monitoring and managing printer component inventories wherein the monitoring further comprises periodically polling the printer components of the printers in the first/second organizations (reference A: real-time printer status, proactive printer management, configurable alerts, scheduled automatic discovery; Paragraphs 1, 3, Page 1; Row 2, Page 2; Row 9, Page 2; Row 1, Page 3).

Regarding Claims 10 and 29 HP does not expressly teach an order module for order replacement components as claimed.

Using a system (model, supplier, etc.) to order replacement components (consumables) is a widely practiced business activity wherein most organizations use a

system (e.g. a supplier's web site, internal purchasing/procurement system, etc.) to order replacement components and/or other supplies.

It would have been obvious to one skilled in the art at the time of the invention that the system and method for managing and monitoring printer component inventories, with its ability to inform users on the status of a plurality of printer components thereby enabling users to order replacement components, as taught by HP would have benefited from enabling users to order replacement components via an order system thereby supporting the well known replacement ordering process commonly practiced by businesses.

Regarding Claim 12 HP teaches a system and method for remotely monitoring and managing printer component inventories wherein the connection means further comprises a network interface card that provides a connection with a network (reference A: network printers, network peripherals, IPX/IP protocols, Web Server, printer IP address; Page 1; Figures 2, 6).

Regarding Claim 13 HP does not expressly teach that the connection means further comprises a modem that provides a telephone line connector with a computer device as claimed.

The utilization of modems to remotely access devices and/or networks is well known.

It would have been obvious to one skilled in the art at the time of the invention that the system and method for remotely monitoring printer component inventories as taught by HP would have benefited from enabling users to remotely access a network of printers via a modem in accordance with well known business practice.

Regarding Claim 23 HP teaches a system and method for remotely monitoring and managing a plurality of peripherals in a plurality of organizations (logical groups, teams, entities, locations, offices, etc.) wherein the monitoring comprises monitoring circuitry (software, hardware, module, component, computer, device, etc.; reference A: "integrated web server", Paragraphs 1-2, Page 1; JetDirect, Row 4, Page 2; Row 7, Page 2; Paragraph 1, Page 6).

Regarding Claims 24, 27 and 31 HP teaches a system and method for remotely monitoring and managing a plurality of peripherals in a plurality of organizations wherein the monitoring comprises monitoring using an entity (person, group, computer, hardware, software, device, LAN administrator, etc.) remotely spatially located from at least one of the printers of one of the organizations (teams, groups, logical groupings, locations, offices, etc.; reference A: "remote management", Page 1; Paragraph 1, Page 6; Figures 1-9).

Regarding Claims 25-26 and 30 HP teaches a system and method for remotely monitoring and managing a plurality of peripherals in a plurality of organizations (teams, groups, logical groupings, locations, divisions, offices, etc.; reference A: "remote management", Page 1; Paragraph 1, Page 6; Figures 1-9).

Regarding Claim 28 HP teaches a system and method for remotely monitoring and managing a plurality of peripherals in a plurality of organizations wherein the system communicates with the plurality of printers in one or more organizations as discussed above.

HP does not expressly teach storing thresholds for a plurality of printers as claimed.

Using thresholds (triggers, test conditions, conditions, events, etc.) in rule-based systems to cause the execution/triggering of one or more rules based on the one or more thresholds is old and well known.

It would have been obvious to one skilled in the art at the time of the invention that the system and method for remotely monitoring and managing a plurality of printers as taught by HP would have benefited from utilizing well know rule-based system/method techniques including but not limited to the use of thresholds to trigger the execution of one or more rules in accordance with well known business practices.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-4, 7-10, 13-19, 21-24 and 28-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Hayward et al., U.S. Patent No. 6,798,997.

Regarding Claims 1, 9 and 17 Hayward et al. teach a system and method for managing printer component inventories comprising (Abstract):

- defining one or more printer (marking apparatus) component (consumables) rules for one or more printers in more than one (first/second) organization (entities, companies, locations, teams, groups, etc.; Column 2, Lines 1-4; Column 6, Lines 35-40; Column 7, Lines 20-35) wherein each printer component rule defines a printer component event (action, condition, activity, trigger, etc.) that indicates that the printer component requires replacement (Column 2, Lines 5-16; Column 6, Lines 1-48; Column 8, Lines 26-45; Figures 4-8);

- monitoring (polling, watching, detecting, etc.) the printer components more than one (first/second) organization (location, sites, groups, teams, entities, etc.) printers to

detect an occurrence of a printer component event as defined by the printer component rule (i.e. the printer component event occurring when the printer component conditions satisfy at least one of the printer component rules; Column 1, Lines 58-68; Column 2, Lines 1-50; Column 5, Lines 56-60; Column 6, Lines 1-15; Figures 3-4; Figure 6, Element S21; Figure 7, Element S32);

- replacing a printer component when a printer component event is detected (Figures 4-8); and

- wherein the system further includes a processor, memory, computer readable media containing computer executable instructions, and connection means for establishing at least one electronic connection (Column 1, Lines 50-63; Column 3, Lines 39-68; Figure 2, Elements 20, 34, 38; Figure 8, Elements 21, 34, 37).

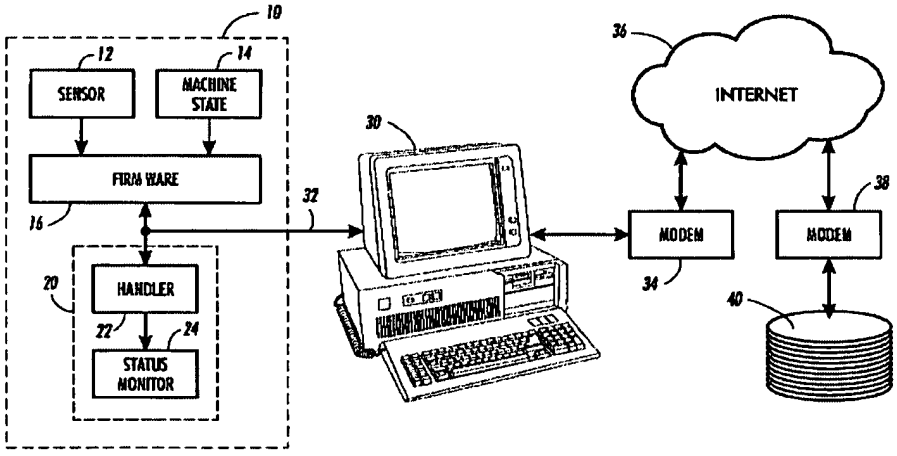

FIG. 2

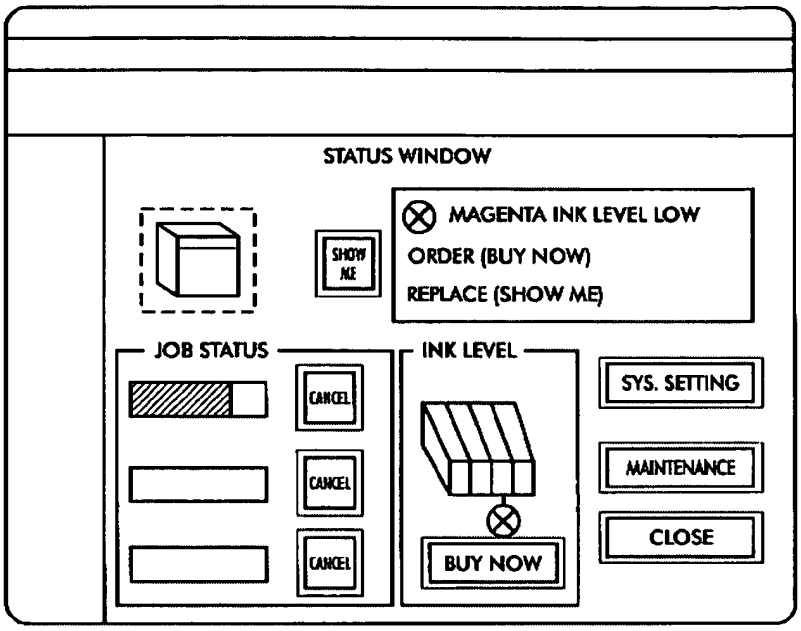
STATUS WINDOW
SHOW ME
MAGENTA INK LEVEL LOW
ORDER (BUY NOW)
REPLACE (SHOW ME)
JOB STATUS
CANCEL
CANCEL
CANCEL
INK LEVEL
BUY NOW
SYS. SETTING
MAINTENANCE
CLOSE

FIG. 4

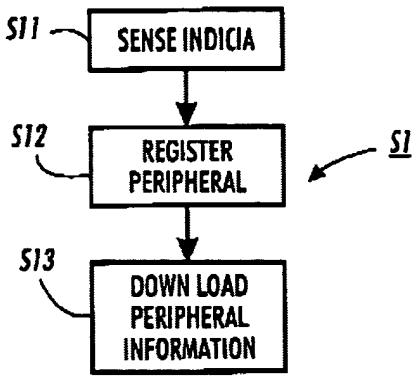
S11
SENSE INDICIA
S12
REGISTER PERIPHERAL
S1
S13
DOWN LOAD PERIPHERAL INFORMATION

FIG. 5

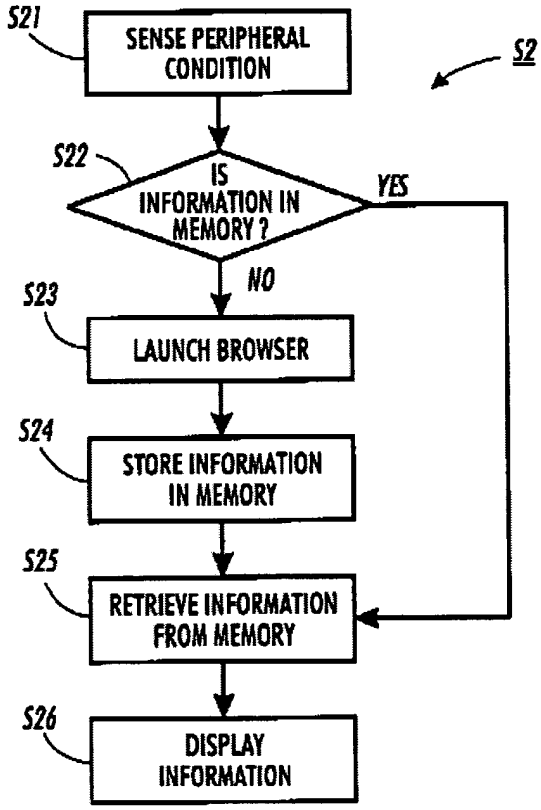
S21
SENSE PERIPHERAL CONDITION
S2
S22
IS INFORMATION IN MEMORY ?
YES
NO
S23
LAUNCH BROWSER
S24
STORE INFORMATION IN MEMORY
S25
RETRIEVE INFORMATION FROM MEMORY
S26
DISPLAY INFORMATION

FIG. 6

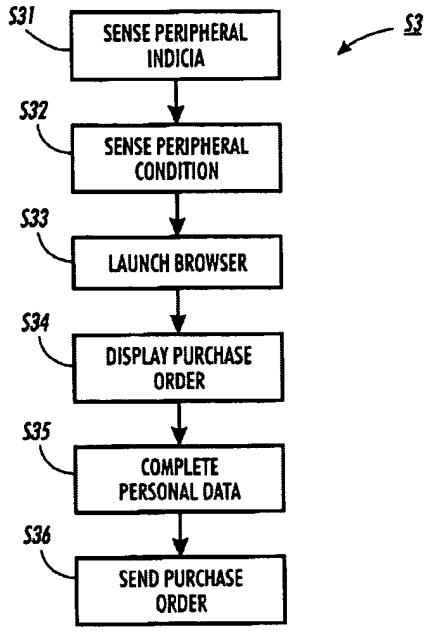
S31
SENSE PERIPHERAL INDICIA
S3
S32
SENSE PERIPHERAL CONDITION
S33
LAUNCH BROWSER
S34
DISPLAY PURCHASE ORDER
S35
COMPLETE PERSONAL DATA
S36
SEND PURCHASE ORDER

FIG. 7

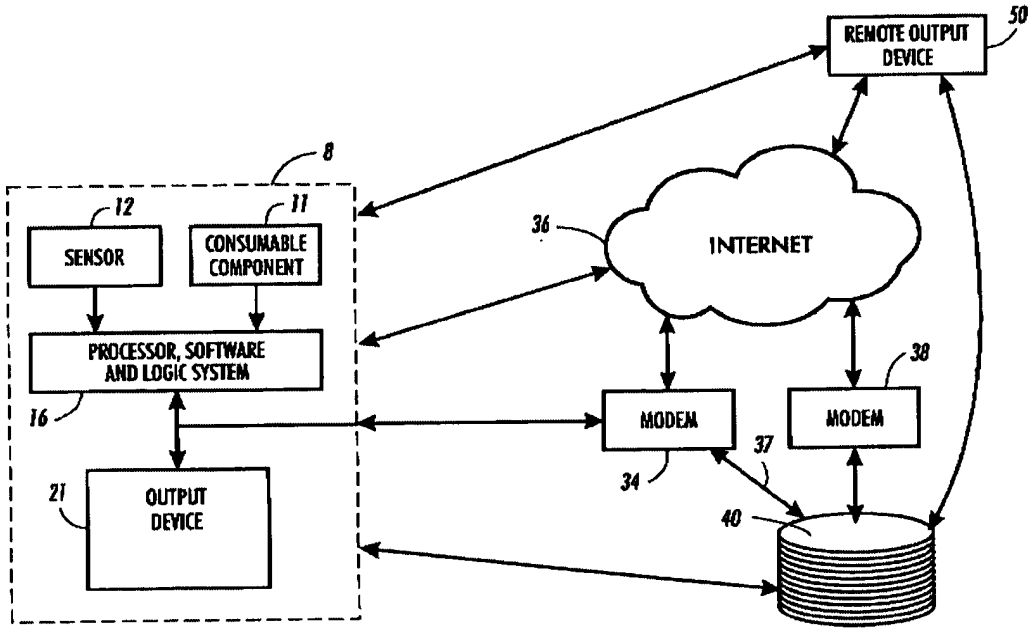
REMOTE OUTPUT DEVICE
50
8
12
11
SENSOR
CONSUMABLE COMPONENT
36
INTERNET
PROCESSOR, SOFTWARE AND LOGIC SYSTEM
16
MODEM
MODEM
38
37
34
21
OUTPUT DEVICE
40

FIG. 8

Regarding Claims 2-3, 10 and 18-19 Hayward et al. teach a system and method for managing printer components wherein replacing the printer component further comprises ordering and shipping the printer component to a location in which the printer component event was detected ("Buy Now", shipment options; Column 4, Lines 38-46; Column 8, Lines 46-53; Figures 4, 7).

Regarding Claim 4 Hayward et al. teach a system and method for managing printer components wherein the printer components are at least one of the following (selected from the following list): toner cartridge, ink cartridge, ribbon cartridge, dry medium cartridge, ink bladder, photoconductor, drum, belt, developer assembly, cleaning roller, oiling roller, transfer assemblies or print head (Column 1, Lines 20-24; Column 9, Lines 38-42).

Further it is noted that the list of printer components merely represents non-functional descriptive material and are not functionally involved in the steps recited nor do they alter the recited structural elements. The recited method steps would be performed the same regardless of the specific printer component(s) being managed. Further, the structural elements remain the same regardless of the specific printer component(s) being managed. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, *see In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP 2106.*

Regarding Claims 7, 16 and 22 Hayward et al. teach a system and method for managing printer components wherein detecting the printer component event further comprises receiving a notification (message, alert, call, etc.) from an organization (individual, user, team, group, entity, company, location, entity, etc.) that the printer component event has occurred in one of the organization's printers (e.g. user checks printer status and decides to click "Buy Now" based on the status of the monitored printer component which then sends a purchase request to a third party system requesting the replacement printer component; Column 7, Lines 50-68; Figures 5-6).

Regarding Claims 8, 14 and 21 Hayward et al. teach a system and method for managing printer components wherein monitoring further comprises periodically polling (interrogating) the status (condition, etc.) of the printer components in the more than one organizations (locations, sites, entities, team, groups, businesses, etc.; Column 8, Lines 32-45; Column 9, Lines 10-15).

Regarding Claim 13 Hayward et al. teach a system and method for managing printer components wherein the connection means is a modem that provides a telephone line connection with a computing device (Column 3, Lines 39-68; Column 4, Lines 1-9; Figures 2, 8, Element 38).

Regarding Claim 15 Hayward et al. teach a system and method for managing printer components wherein monitoring further comprises receiving a notification (alert,

message, etc.) from the printer that a printer component event has occurred (Column 6, Lines 35-63; Column 8, Lines 26-45; Column 9, Lines 1-15; Figures 6-8).

Regarding Claims 23 Hayward et al. teach a system and method for managing printer components wherein the monitoring further comprises using processing circuitry (component, subsystem, module, etc.; Figures 1-2, Element 10; Figure 8, Element 8).

Regarding Claims 24 and 31 Hayward et al. teach a system and method for managing printer components wherein the monitoring further comprises using an entity (person, company, computer, system, module, component, code, etc.) remotely spatially (different location, another room, another office, etc.) located from at least one of the organizations (persons, groups, entities, locations, businesses, etc.) printers (Column 6, Lines 35-40; Column 9, Lines 1-20; Figure 2, Elements 34, 36, 38, 40; Figure 8, Elements 34, 36, 38, 40, 50).

Regarding Claim 28 Hayward et al. teach a system and method for managing printer components further comprising storing thresholds (events, levels, conditions, triggers, etc.) for a plurality of printers in more than one organization (first/second) and to communicate with the printers (Column 2, Lines 43-51).

Regarding Claim 29 Hayward et al. teach a system and method for managing printer components wherein the ordering further comprises ordering in response to the

occurrence of a printer component event in one of the printers (Column 1, Lines 57-63; Column 5, Liens 5-12; Column 7, Lines 54-68; Column 8, Lines 1-45; Figure 6-7).

Regarding Claim 30 Hayward et al. teach a system and method for managing printer components wherein the monitoring further comprises monitoring printer component conditions (levels, status, events, thresholds, etc.) in a plurality of printers of a plurality of organizations (teams, locations, personnel, sites, entities, businesses, etc.; Column 1, Lines 58-68; Column 2, Lines 1-50; Column 5, Lines 56-60; Column 6, Lines 1-15; Figures 3-4; Figure 6, Element S21; Figure 7, Element S32).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 5-6, 11-12 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayward et al., U.S. Patent No. 6,798,997 as applied to claims 1-4, 7-10, 13-19, 21-24 and 28-31 above and further in view of Istvan, Anthony, U.S. Patent Publication No. 2002/0042747.

Regarding Claim 5 Hayward et al. teach a system and method for managing a plurality of printer components (devices, consumables, replacements, parts, peripherals, etc.) and that the system/method detects/monitors a plurality of printer component conditions including but not limited to low media (ink, toner, etc.) levels (Column 6, Lines 8-12; Column 9, Lines 26-32 and 40-42; Figure 4, "Status Window").

Hayward et al. does not expressly teach that the printer component is a toner cartridge for a *laser printer* or subsequently that the printer component event is a low toner condition in the toner cartridge (for the laser printer) as claimed.

Istvan teaches that the printer component is a toner cartridge for a laser printer and that the printer component event is a low toner condition for a laser printer

(Paragraphs 0004-0006, 0028, 0074, 0083) in an analogous art of printer component management for the purposes of enabling users order replacements for the low laser printer toner cartridge when notified by the printer component monitoring system and method (Paragraphs 0008, 0075, 0089).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for managing printer components as taught by Hayward et al. with its ability to monitor a plurality of printer components conditions/events would have benefited from monitoring/detecting a low toner event for a laser printer toner in view of the teachings of Istvan the resultant system/method enabling users order replacements online for the low laser printer toner cartridge when notified by the printer component monitoring system and method (Istvan: Paragraphs 0008, 0075, 0089).

Regarding Claims 6, 11 and 20 Hayward et al. does not expressly teach providing an interface to allow organizations to define printer component rules for their organization(s) as claimed.

Istvan teaches enabling organizations (users, divisions, companies, entities, groups, teams, printer, etc.) to define printer component (part, item, material, supply, etc.) rules (threshold, criteria, parameters, events, alerts, etc.) for the printer via an interface (customization module; Paragraphs 0074-0075), in an analogous art of printer component management for the purposes of enabling users to "specify and customize

those settings in place of the default settings to suit the user's needs and preferences." (Istvan: Paragraph 0075).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for managing printer components as taught by Hayward et al. would have benefited from enabling organizations to define printer component rules (conditions, thresholds, triggers, etc.) via an interface in view of the teachings of Istvan; the resultant system/method enabling users to "specify and customize those settings in place of the default settings to suit the user's needs and preferences." (Istvan: Paragraph 0075).

Regarding Claim 12 Hayward et al. teach that the system and method for managing printer components further comprises one or more communication means (links) for connecting to the network wherein the connection means includes wired and wireless connections (Column 1, Lines 55-63; Column 4, lines 1-10; Column 3, Liens 39-68; Column 9, Lines 16-20).

Hayward et al. does not expressly teach that the system and method for managing printer components further comprises a network interface card as claimed.

Official notice is taken that the utilizing a network interface card to connect/communication to/with a network is old and very well known.

It would have been obvious to one skilled in the art at the time of the invention that the system and method for managing printer components over a network as taught by Hayward et al. would have benefited from utilizing any of a plurality of well known communication/connection means including but not limited to a network interface card in view of the teachings of official notice.

Further it is noted that while Hayward et al. does not expressly teach the utilization of a *network interface card*; these differences are only found in the non-functional descriptive material and are not functionally involved in the steps recited nor do they alter the recited structural elements. The recited method steps would be performed the same regardless of the specific connection/communication means/link used to connect the printer components to the network. Further, the structural elements remain the same regardless of the specific connection/communication means/link used to connect the printer components to the network. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, *see In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP 2106.*

12. Claims 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayward et al., U.S. Patent No. 6,798,997 as applied to claims 1-4, 7-10, 13-19, 21-24 and 28-31 above, and further in view of Fan et al., U.S. Patent No. 6,310,692.

Regarding Claims 25-27 Hayward et al. teach a system and method for managing printer components wherein the system enables the remote (spatially located from at least one of the organization(s) printers) monitoring/management of the plurality of printer components (marking apparatus) as discussed above.

Hayward et al. does not expressly teach using a *single entity* to monitor the printers via the connection means as claimed.

Fan et al. teach using a single (centralized) entity (person, company, computer, system, module, component, code, etc.) to monitor a plurality of printers in a plurality of organizations via a connection means in analogous art of peripheral management for the purposes of enabling a user to dynamically monitor a plurality of printer resources from a central/single location (Column 5, Lines 60-65).

More generally Fan et al. teach a system and method for managing a plurality of printers/printer resources (supplies, components) remotely and locally (multiple devices, multiple organizations) for a plurality of organizations comprising:

- detecting and reporting a plurality of printer component user-configurable issues/conditions (rules, thresholds, etc.; Column 3, Lines 1-30; Column 4, Lines 15-62);

- enabling both push (notification, alerts) and pull (polling) monitoring of the plurality of printer components (Column 5, Lines 1-14);

- a database for storing a plurality of system/device parameters (attributes; Column 2, Lines 21-29; Figure 2); and

- enabling users to define notification profiles for the plurality of printer components which define the when, who and what relating to printer condition statusing/notifications (Column 5, Lines 37-65).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for managing and monitoring printer components as taught by Hayward et al. would have benefited from centrally monitoring and managing the plurality of printer components (single entity) in view of the teachings of Fan et al.; the resultant system/method monitor a plurality of printer resources from a central/single location thereby eliminating the need for a user (personnel) to be physically be at each printer in order to manage it (Fan et al.: Column 5, Lines 60-65).

Conclusion

This Office action has an attached requirement for information under 37 C.F.R. § 1.105. A complete response to this Office action must include a complete response to the attached requirement for information. The time period for reply to the attached requirement coincides with the time period for reply to this Office action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Garr et al., U.S. Patent No. 5,802,420, teach a system and method for monitoring one or more printer components wherein the system displays the current and predicted printer component usage levels for one or more printers. Garr et al. further teach that the system/method provides alerts when printer component levels reach/pass threshold values.

- Haines et al., U.S. Patent No. 6,233,409, teach a system and method for managing printer component inventories comprising monitoring, ordering and replacing the printer components of one or more printers.

- Wolf et al., U.S. Patent No. 6,275,664, teach a system and method for managing remote printer components comprising monitoring one or more printers/printer components and notifying users of one or more printer component events, such as low laser printer toner level, such that users/organizations know the condition of the consumable supplies.

- Kakeshita et al., U.S. Patent No. 6,594,451, teach a system and method for monitoring and reporting on the consumables usage of one or more image forming devices (printers, copiers, etc.) in order to facilitate the replacement of low consumables (cartridges, drums, etc.).

- Seiko Epson Corp., JP2001-071533, teaches a system and method for managing printer components comprising monitoring and reporting on the level of printer component used/remaining.

- EP 1126391A2, Canon Kabushiki Kaisha, teaches a system and method for remote printer consumables (expendable) management.

- Pepper, Jon, Peripherals – Smart printers get smarter (1996) teaches a plurality of commercially available systems (products) for remotely monitoring a plurality of printers and printer components including but not limited to HP's JetAdmin with its ability to monitor and alert users from a central administration console of a plurality of events including but not limited to out-of-toner events.

- Muhtar, Fauziah, Useful features in workgroup printer (1998) teaches a plurality of well-known workgroup printer features including Lexmark's Markvision product for remote network printer management via a graphical user interface.

- HP Extends Breadth of Internet Printing Solutions to Millions of Installed HP Printers (1999) teaches HP's system/method for the remote management of network printers. The article further teaches that "HP Web JetAdmin is the industry's leading Web-based peripheral-management software offering many powerful features, including universal printer support, simplified network-printer installation, configuration and

management, remote printer management, enterprise integration and features designed to reduce help-desk calls, such as proactive alerts."

- Muhtar, Fauziah, Host of New HP business products (2000) teaches a remote printer component management system and method wherein the system/method "is embedded with HP Web JetAdmin software, a Web server for remote-management capabilities. The technology works with Web JetAdmin to enable electronic mail alerts, real-time status updates and diagnostics, firmware upgrades, self-help messages and **online consumables management.**" (emphasis added).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott L. Jarrett whose telephone number is (571) 272-7033. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hafiz Tariq can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SJ
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TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600